

ABSTRACT

An apparatus and method for processing a conductive surface of a wafer to form a planar layer is disclosed. The method for processing comprises maintaining a low temperature processing environment, wetting the conductive surface with an electrolyte solution having at least one additive disposed therein, a first amount of the additive becoming adsorbed on the top portion and a second amount of the additive becoming adsorbed on the cavity portion, applying an external influence to the top portion, the external influence removing a part of the first amount of the additive adsorbed on the top portion, and processing the conductive top surface before the additive re-adsorbs onto the top portion to provide a planar layer. Advantages of the invention include improved control of deposited metal to improve device consistency and yield.